

body fluids of human subjects having or suspected of having cancer: cerebrospinal fluid, urine, saliva, [and] sputum, peritoneal fluid, pleural fluid and bronchial washings, and determining the amount of lipid associated sialoprotein in a sample of such fluid which comprises the following steps:

- a) adding to the sample a mixture of a chlorinated lower alkyl hydrocarbon and a lower alkyl alcohol;
- b) mixing the resulting admixture for a suitable period of time to dissolve lipid-bound sialic acid in the sample in the chlorinated hydrocarbon/alcohol mixture;
- c) centrifuging the mixture at **[high speed] about 6000 rpm** to form a substantially clear upper phase;
- d) separately recovering from the clear upper phase so formed a predetermined volume of the upper phase;
- e) adding to the predetermined volume of the upper phase an amount of a mixture of an aqueous protein-precipitating agent without any absorbing material, the amount of mixture being effective to cause precipitation of the lipid associated sialoprotein;
- f) vortexing the resulting admixture;
- g) centrifuging and recovering the resulting precipitate;
- h) washing the precipitate in a saline solution;
- i) centrifuging the resulting mixture;
- j) dissolving the precipitate in water;
- k) adding to the solution a hydrolysis agent;

- l) heating the resulting admixture;
- m) determining the amount of lipid associated sialoprotein present in the solution and thereby the amount present in the fluid sample.

**Amend claim 17 as follows:**

- -17. **Amended:** A method of diagnosing cancer in a human subject which comprises determining the amount of lipid associated sialoprotein in a sample of the subject's cerebrospinal fluid, urine, saliva, [or] sputum, peritoneal fluid, pleural fluid or bronchial washings according to the method of claim 1 and comparing the amount so determined with amounts previously obtained for subjects known to have cancer by use of the method of claim 1.

**Amend claim 18 as follows:**

- -18. **Amended:** A method of diagnosing cancer in a human subject which comprises determining at regular time intervals the amount of lipid associated sialoprotein in a sample of the subject's cerebrospinal fluid, urine, saliva [or] sputum [sample], peritoneal fluid, pleural fluid or bronchial washings, according to the method of claim 1 and comparing the amounts so determined with amounts previously obtained for the subject by use of the method of claim 1.

**Cancel Claim 19: in its entirety.**